



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/921,844

08/03/2001

Gary K. Michelson

101.0084-01000

8295

22882 7590 06/12/2008
MARTIN & FERRARO, LLP
1557 LAKE O'PINES STREET, NE
HARTVILLE, OH 44632

EXAMINER

SNOW, BRUCE EDWARD

ART UNIT

PAPER NUMBER

3738

MAIL DATE

DELIVERY MODE

06/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/921,844	Applicant(s) MICHELSON, GARY K.	
	Examiner Bruce E. Snow	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 213, 219 and their depending claims is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and its depending claims is/are allowed.
- 6) ☒ Claim(s) 131, 219 and their depending claims is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/17/08 has been entered.

Response to Arguments

Applicant's amendments and arguments filed 4/17/08 have been fully considered.

Regarding the rejection of claim 131 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fraser et al (6,592,624), applicant argues that the first 32 and second 34 facets are not opposite, the Examiner disagrees. Looking at figure 1A of Fraser et al, facet 32 has a right component of direction; facet 34 has a left component of direction, therefore, the facets can be described as being opposite. The Examiner notes the applicant's facets are not completely opposite in direction.

Regarding the included angle being obtuse, as stated in the grounds of rejection:

"Note that the width Wf (figure 1A) can be 1-4 mm and the height (figure 1B) can be 0.1 - 5mm; with a width of 4 mm and a height of 0.1, the included angle at the tip would be much greater than 90 degrees (obtuse)."

Applicant's amendments and arguments regarding the rejection of claim 219 as being anticipated by Paul were persuasive. However, claim 219 was rejection by Fraser et al and a combination rejection of Paul in view of Fraser.

Specification

The amendment filed 10/09/07 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: an included angle that is larger than 90 degrees. Applicant specification does not indicate that the drawings are to scale. Further, a single drawing can only teach a single included angle between the sides, not a range of "greater than 90 degree".

Applicant is required to cancel the new matter in the reply to this Office Action.

Allowable Subject Matter

Claims 1 and its depending claims are allowed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 3738

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 131 and 219 and their depending claims (at least 131, 133, 135, 137-145, 205, 206, 213-215, 228-254, 272-284) and are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fraser et al (6,592,624).

Fraser et al teaches a spinal implant comprising a plurality of projections 18 as shown in figures 1 and 1C formed on the upper and lower surfaces of the implant. The projections are slanted towards the trailing end, therefore, having a first facing facet 32 which is longer than a second facet 34 opposite of the first facet, and the slope of the second facet 34 being steeper as shown in figure 1C.

The second facet 34 having a perimeter, at least with a first side and a second side (generally 38 and 40 in figure 1A), said first and second sides of said perimeter being in a convergent relationship to each other having an included angle greater than 90 degrees therebetween. Note that the width Wf (figure 1A) can be 1-4 mm and the height (figure 1B) can be 0.1 - 5mm; with a width of 4 mm and a height of 0.1, the included angle at the tip would be much greater than 90 degrees.

Regarding claim 219, referring to figure 1C of Fraser, the length of the forward facing facet 36 can be greater than the maximum length of the base. The rearward facet is element 34.

Many of applicant's dependent claims claim a wide range of limitations, for example, elements/materials/shapes/tools/etc which lack criticality in the specification, the use of any limitations in lieu of those used in the references solves no stated problem and produces no benefits and would have been an obvious matter of design choice for someone skilled in the art. Additionally, these limitations are well known in the prosthetic art and would have been obvious to one having ordinary skill.

Additionally, it would have been obvious to one having ordinary skill to have used any bone growth material known in the art or to have constructed the implant from any material known in the art for their known properties and characteristics.

Finally, it would have been obvious to one skilled in the art to have used the projects of Paul et al on any known vertebrae implant to provide anchoring.

Claims 131, 219 and their dependent claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul et al (6,258,125) in view of Fraser (6,592,624).

Paul et al teaches a spinal implant comprising a plurality of pyramid-shaped projections 12, as shown in figures 9, 10A, and 11, formed on the upper and lower surfaces of the implant; see 3:42. The projections are slanted towards the trailing end, therefore, having a forward facing facet which is longer than a rearward facet. The projections further include side facets and a rectangular base.

However, Paul et al is silent regarding the length of the forward facing facet being greater than the maximum length of the base.

Referring to figure 1C, Fraser teaches a similar spinal implant having surface projections 18 wherein the rearward facet 34 can either have a positive slope (like that of Paul et al or shown in figure 1A) or negative slope. It would have been obvious to one having ordinary skill in the art to have formed the rearward facet of Paul al forming a negative slope such that the length of the forward facing facet is greater than the maximum length of the base such that the projections dig into the bone and better resists expulsion.

Regarding claim 131, second facet having first and second sides converging to the peak forming a obtuse angle, Fraser et al teaches a width of the projection W_f about 1-4 mm and height of the projection H_f about 0.1-5 mm. It would have been obvious to one having ordinary skill in the art that the combination projection would maintain the same dimensions as taught by Fraser et al or Paul et al.

Many of applicant's dependent claims claim a wide range of limitations, for example, elements/materials/shapes/tools/etc which lack criticality in the specification, the use of any limitations in lieu of those used in the references solves no stated problem and produces no benefits and would have been an obvious matter of design choice for someone skilled in the art. Additionally, these limitations are well known in the prosthetic art and would have been obvious to one having ordinary skill.

Additionally, it would have been obvious to one having ordinary skill to have used any bone growth material known in the art or to have constructed the implant from any material known in the art for their known properties and characteristics.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce E. Snow whose telephone number is (571) 272-4759. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruce E Snow/
Primary Examiner, Art Unit 3738